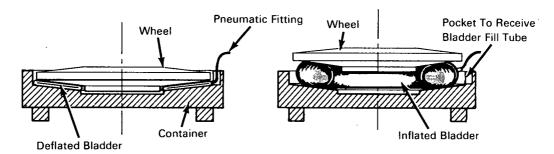
## NASA TECH BRIEF



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## Inflatable Bladder to Facilitate Handling of Heavy Objects: A Concept



A means has been proposed to facilitate the removal of heavy, highly finished metal parts from tote boxes or shipping containers, without the danger of damage to the parts or injury to handling personnel. Various parts, such as turbine wheels and impellers, are usually tightly nested for maximum support in their containers. To remove these parts or position them in the containers, considerable manipulation is necessary, often requiring the combined efforts of two or three persons.

The container would be designed to house an inflatable bladder or tube which would support the part. The bladder would be equipped with a simple check valve. To place a part in its container, the bladder would be inflated from a standard air pressure line. The part would be set on top of the inflated bladder, and the pressure would be slowly released until the part settles to its proper place in the container. The part can be elevated out of the container, where it can be easily handled, by inflating the bladder to the required air pressure.

## Note:

This invention is only in the conceptual stage; neither a model nor a prototype has been constructed as of the date of this Tech Brief.

## Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C., 20546.

Source: G. J. McGoldrick of North American Rockewell Corp. under contract to Marshall Space Flight Center (MFS-14272)

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